

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application

Listing of Claims:

Claims 1-43 (Cancelled)

44. (Currently amended) [[The]] A solid-state imaging apparatus of Claim 43, further comprising being one of pieces diced from an assembly, the solid-state imaging apparatus comprising:

a light-receiving chip having a plurality of light-receiving cells arranged either one dimensionally or two dimensionally on a main surface of a base substrate, the main surface being made up of a light-receiving area on which the light-receiving cells are arranged and a periphery area surrounding the light-receiving area;

a transparent protection plate, at least a part thereof that corresponds to the light-receiving area being transparent; and

a collective lens of the light-receiving [[cell]] cells, wherein the transparent protection plate has a skirt portion at a periphery thereof, the skirt portion is positioned on the periphery area of the main surface thereby forming a space between the light-receiving cells and the transparent protection plate,

the assembly is comprised of two layers, the two layers being a sheet of transparent protection plates and a semiconductor wafer of light-receiving chips that are attached to each other such that each transparent protection plate is combined with a corresponding light-receiving chip, and the diced pieces have such diced edges that result by cutting the two layers simultaneously.

the skirt portion is formed of a sealing material, and

the thickness of a space between the transparent protection plate and the light-receiving cells is greater than a height of the collective lens by 10μm – 100μm.

45. (Currently amended) [[The]] A solid-state imaging apparatus of Claim 43, further comprising being one of pieces diced from an assembly, the solid-state imaging apparatus comprising:

a light-receiving chip having a plurality of light-receiving cells arranged either one dimensionally or two dimensionally on a main surface of a base substrate, the main surface being made up of a light-receiving area on which the light-receiving cells are arranged and a periphery area surrounding the light-receiving area;

a transparent protection plate, at least a part thereof that corresponds to the light-receiving area being transparent; and

a collective lens of the light-receiving [[cell]] cells, wherein
the transparent protection plate has a skirt portion at a periphery thereof,
the skirt portion is positioned on the periphery area of the main surface thereby forming a space between the light-receiving cells and the transparent protection plate,

the assembly is comprised of two layers, the two layers being a sheet of transparent protection plates and a semiconductor wafer of light-receiving chips that are attached to each other such that each transparent protection plate is combined with a corresponding light-receiving chip, and the diced pieces have such diced edges that result by cutting the two layers simultaneously,

the skirt portion is formed of a sealing material, and

a space between the transparent protection plate and the light-receiving cells is filled with a resin whose refractive index is smaller than that of the collective lens.

46. (New) The solid-state imaging apparatus of Claim 44, further comprising a through hole passing through the base substrate.

47. (New) The solid-state imaging apparatus of Claim 45, further comprising a through hole passing through the base substrate.

48. (New) The solid-state imaging apparatus of Claim 46, wherein the through hole electrically connects an electrode disposed on the main surface and an electrode disposed on a back surface opposite to the main surface.

49. (New) The solid-state imaging apparatus of Claim 47, wherein the through hole electrically connects an electrode disposed on the main surface and an electrode disposed on a back surface opposite to the main surface.

50. (New) The solid-state imaging apparatus of Claim 44, further comprising a plurality of through holes passing through the base substrate.

51. (New) The solid-state imaging apparatus of Claim 45, further comprising a plurality of through holes passing through the base substrate.

52. (New) The solid-state imaging apparatus of Claim 50, wherein the plurality of through holes electrically connect electrode disposed on the main surface and electrodes disposed on a back surface opposite to the main surface, respectively.

53. (New) The solid-state imaging apparatus of Claim 51, wherein the plurality of through holes electrically connect electrodes disposed on the main surface and electrodes disposed on a back surface opposite to the main surface, respectively.

54. (New) The solid-state imaging apparatus of Claim 52, wherein the plurality of through holes are insulated from each other.

55. (New) The solid state imaging apparatus of Claim 53, wherein the plurality of through holes are insulated from each other.

56. (New) The solid-state imaging apparatus of Claim 46, further comprising an electrode disposed on a back surface opposite to the main surface and connected to the through hole.

57. (New) The solid-state imaging apparatus of Claim 47, further comprising an electrode disposed on a back surface opposite to the main surface and connected to the through hole.